The Rhetorical Efficacy of Michael F. Guyer's *Being Well-Born*

A Senior Honors Thesis

Presented in Partial Fulfillment of the Requirements for graduation
with distinction in the Department of English with a Rhetoric and Composition Focus
in the undergraduate colleges of The Ohio State University

by

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June 2006

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Abstract

The political power of the rhetoric of science originates from the emphasis that is put on objective truth. To contribute to a fuller understanding of this trend and its consequences, I propose to present and analyze the rhetorical efficacy of a popular scientific textbook, Michael F. Guyer's *Being Well-Born: An Introduction to Heredity and Eugenics* (1927), in the context of the highly susceptible culture of turn-of-the-century America. By understanding how this text functioned during its publication, more than forty years after Francis Galton first coined the term "eugenics," I can examine the cultural situation to which Guyer speaks. Guyer's rhetorical strategies create an *ethos* of rationality, compassion, and morality, which influences and reassures his audience about the ethical and political necessity of accepting his conclusions. Understanding this conversation lends a greater understanding of current discourse surrounding fields that concern themselves with genetic engineering.

To my mother Laurie, to Joe, to Anna,

and to the rest of my family,

without whom I am a ship lost in a sea of threatening bubbles.

Acknowledgements

I would thank my project advisors Dion C. Cautrell, for beginning me in the direction of rhetoric and composition, and Nan Johnson, without whose advice I may never have taken the bull by the horns. I couldn't have done without the gracious support of Brenda Brueggemann and Scot Danforth, nor without the encouragement from Sharyn Talbert and the continuing cultivation I am grateful to have received from Jim Fredal, Elizabeth Renker, and Brian McHale.

Introduction

The rhetoric of science has a great amount of influence on American politics. Because of the public perception of the scientist as an objective seeker of knowledge, the conclusions a scientist brings to the public arena are generally assumed to be based on a set of scientifically tested facts explicated through logically organized arguments. Only since the 1960s and 1970s has the idea of the rhetorical nature of scientific discourse been discussed and the objectivity of the scientist been called into question, beginning with Thomas Kuhn's *Structure of Scientific Revolutions* in 1962 and gaining support in the following years.[1] The tautology "a scientist using science finds scientifically valid conclusions" can be understood as functioning through the *logos* and *pathos* of the public *ethos* of the scientist.[2] As Kenneth Burke has noted, "the cult of applied science has the animus of all three" subjects of religion, politics, and economics (Burke 32). A new scientific discovery can cause people to buy a new product or discard something they have used for years, to condone or condemn behavior in others, or to vote for or against new legislation. This rhetoric has tremendous political potential because science's power originates in the perceived importance of objective truth, a value which transcends party lines.

Near the turn of the twentieth century, one of the most vibrant socio-political movements was eugenics, a campaign that in America exploited the common perceptions of the degeneration of the country that resulted "not only from the falling birth rate of the talented few but also from what they believed was the growing incidence of feeblemindedness, insanity, crime, and pauperism" (Haller 80). Eugenicists centered on the co-opting scientific ideas to appeal to a large following, allowing the leaders of the movement to influence currents of political power

[1] Rhetoricians influenced, directly or indirectly by Kuhn include Richard Rorty, Robert Scott, Charles Bazerman, Lawrence Prelli, Carolyn Miller and Jeanne Fahnestock (Harris "Intro," *Landmark Essays*).

[2] Figures used to appeal to reason, or logos, figures used to appeal to emotion, or pathos, and figures used to establish credibility, or ethos, are used in successful arguments in conjunction with one another.

arising “from a generation of research into the causes of the social ills that beset the nation” (Haller 77). From the eugenics movement sprang popular beliefs regarding the ability of science to improve the fate of the human race through controlling or coddling the “germ-plasm,” a word which was used then in scientific discourse much as we now use the word “gene.” In the early years of the movement, the rhetoric of eugenics barely made itself noticed by Americans. In the twenty-first century we can analyze that time with more clarity, and by understanding the ways in which scientists manipulated language in former ages by taking advantage of contextual pressures, we can understand the ways in which modern scientists may manipulate contemporary readers, with rhetoric situated in such a way as to allow the rhetor to bringing attention to the arguments and not to the manipulation that is employed.

To contribute to a fuller understanding of this legacy and its consequences, I propose to present and analyze the rhetorical efficacy of a popular scientific textbook, Michael F. Guyer's *Being Well-Born: An Introduction to Heredity and Eugenics* (*BWB* 1927), in the context of the highly susceptible culture of turn-of-the-century America.[3] By understanding how this text functioned from the decades following Francis Galton's published studies of eugenics to the movement's fall into disrepute in the early 1930s, I can examine the cultural situation to which Guyer speaks. Guyer’s rhetorical strategies create an *ethos* of rationality, compassion, and morality, which influences and reassures his audience about the ethical and political necessity of accepting his conclusions. *Being Well-Born*, a text which has been criticized as “weak rhetoric” and “mediocre” (Reuter 667), is a collection of ideas and assertions that exemplifies the rhetorical strategies that play to a universal audience. These criticisms that *Being Well-Born* has faced are results of Guyer’s decision to pull back from an aggressive call-to-action that many of

[3] The 1927 publication of *Being Well-Born* followed the first edition, called *Being Well-Born: An Introduction to Eugenics* (*BWB* 1916).

his contemporaries used. I will demonstrate how this enhances the *ethos* of the text. Guyer's own scientific knowledge is presented in a science textbook, ostensibly for "all who are interested in questions of human nature, education, and social reform" (O'Shea, Introduction, *BWB* 1916), but the *logos* of his argument functions in conjunction with the so-called "irrational" principle of *pathos*, or appeal to emotion (Waddell, "The Role of Pathos" 128). I will show that the most important aspect of the text is its arguments from the interplay of *logos* and *pathos*, which aids Guyer in creating an *ethos* that generates or maintains readers' tacit approval of the eugenics movement. The analysis of this book, both as an individual text and as a piece of a larger conversation, allows a critical identification of the ideas functioning in this text and in the eugenics era as a whole. This analysis also allows me to apply these ideas to twenty-first century problems, which can only help create a more informed decision-making process concerning basic human rights and scientific authority.

The Context of *Being Well-Born*

Being Well-Born is part of a series of textbooks edited by Michael V. O'Shea of the University of Wisconsin. Professor O'Shea, who undertook the editorship of "a series of educational volumes which are intended to appeal to lay readers as well as to teachers," intended the volumes "all to be about 250 pages in length" and to "deal with different aspects of the school and social situation" ("Educational Writings" 13). The scientific nature of *Being Well-Born*, unlike the reports that Guyer might submit to his peers, was required to be in the "plain language" that the target audience could cleave to. O'Shea, a "good example of the entrepreneur of adolescence" (Kett 283), was a professor of education and "believed that incorporating new methods of teaching children into home life was paramount to successfully raising a child"

(Ward 94). He described his "influential" Childhood and Youth series as "the first systematic attempt to give to parents, teachers, social workers, and all others interested in the care and training of the young, the best modern knowledge about children in a manner easily understood and thoroughly interesting" (O'Shea, qtd. in Ward 94). The creation of the series was the result of his belief that "the twentieth century would be "an era when the welfare of the child will be he chief concern of the home, the community, and the nation" (O'Shea qtd. in Ward 105). Because of the influence of O'Shea, the 1916 edition of *Being Well-Born* gained more popularity than any independent publication by Guyer. With this edition as a springboard for the book's popularity, Guyer was able to revise, expand, and enhance *Being Well-Born* according to his own volition. It was only for the 1927 publication that Guyer, because of his success in the 1916 edition, was able to include the information, illustrations, and examples that were not acceptable for the version seen mainly as a small component of a larger series. By 1927, the many branches of the eugenics movement had an even larger following and a larger collection of data and ideological arguments. Scientific discoveries had inspired the development of more sophisticated theories pertaining to eugenics. These were available for Guyer to include, making the "expansion of the entire book" an "imperative" for the author (Introduction, *BWB* 1927). The popularity of the first edition allowed for a more successful counterpart a decade later.

Michael F. Guyer was "not a leader in either the biological or social-reform aspects of the eugenics movement," and most of his energies remained concentrated on medical education and research (Engs 105-06). Despite this, he had a successful career and gained notable popularity in the publication of his scientific and popular science texts. He taught and researched at the University of Nebraska, then the University of Cincinnati, then the University of Wisconsin in 1911, where he remained until his retirement in 1945. During his time in Wisconsin, the

sterilization legislation of the United States "came to be a hallmark of good reform government to shape public policy with the aid of scientific experts.[4] In many states the practice was modeled after the 'Wisconsin Idea,' advanced by the progressive governor Robert La Follette, of drawing upon experts in the state university for advice in complicated public policy with the aid of scientific experts" (Kevles, *Name* 101). Guyer's ideas, as well as the university at which he taught, were themselves highly influential. Guyer published a series of scientific studies, a lecture on eugenics in 1925, and another popular science textbook in 1942 (*Speaking of Man: A Biologist Looks at Man*). B*eing Well-Born*, a college text (Pauly; Engs) that successfully gained popularity among everyone "interested in the care and training of the young," was used in "Normal School" programs, or educational courses for future teachers (Beatty). *Being Well-Born* was cited as a source of knowledge for people involved in the popularization of the "struggle against feeblemindedness" (Richmond) and the sterilization of "the unfit" (Hunter). During his career, Guyer was primarily concerned with the issues of race suicide (most specifically addressing the lack of population growth among Anglo-Saxons), racial poisons (such as alcoholism), and threats such as insanity, feeble-mindedness, criminality, and immigration.

Examining *Being Well-Born: An Introduction to Heredity and Eugenics* necessitates the examination of the context of its publication in 1927, which was in the eugenics movement's high point. The eugenics movement exerted the most influence from 1910 to 1930, and for the most part caught the attention of the United States between the two World Wars. Understanding that volatile time in American history allows us to understand the strong *ethos* that Guyer was

[4] Sterilization was both one of the most controversial and most politicized aspects of eugenics, and by the 1920s the eugenics movement was sometimes seen as simply a movement for sterilization. Although only about half of eugenics proponents in America favored sterilization, by 1917 sixteen states had legislature on sterilization (Haller 123-134).

able to evoke based on the best available means of persuasion, [5] which were the *pathos* of the images of the family and societal degradation and the *logos* of the scientific arguments which justified eugenics. The historical views presented by Diane Paul, Daniel J. Kelves, and Mark H. Haller reveal the different facets of U.S. culture at the time that were highly sensitive to the issues that eugenics seemingly addressed. The American eugenics movement was especially precipitated by the perceived need for a social solution to the problems of industrialization, urbanization, economic hardships, and ethnic and religious tension in a modernizing society (Kelves, Haller). The revolutionary publication of *The Origin of Species* by Charles Darwin in 1863 quickly became a subject of speculation concerning possible human applications. By 1883 Francis Galton, Darwin's cousin, had coined the term *eugenics* (Greek for "well-born"), and had begun a career of intense research dedicated to the issue of human heredity. Charles Davenport, the pivotal leader of the American eugenics movement, became a counterpart to the British trailblazers and concentrated on approaching these issues using biometrics (the use of statistics with biology). Davenport began institutions such as the Eugenics Record Office and the Eugenics Research Association, both of which collected data and completed research to support eugenic conclusions. Statistics made possible for the first time the idea of the "norm" and "normal," allowing such theorists to apply those ideas to all human experiences (DePoy and Gilson 18). The eugenicists, embracing value structures based on the popular notion of utilitarianism,[6] encouraged people to feel that social programs were an unnecessary burden and

[5] In Aristotle's *On Rhetoric*, the task of the rhetoric is described as finding the best available means of persuasion or the most effective way of convincing the audience.

[6] Utilitarianism is a theory of ethics that prescribes the maximization of positive consequences for a larger population over the interest of the individual. Some 19th century advocates of utilitarianism include Jeremy Bentham, John Stuart Mill, William Godwin, James Mill, and Henry Sidgwick.

quickly came to believe "that natural selection and Mendelian gene distributions could provide models for social ethics" (Smith 132).[7]

An examination of the social problems of the early 1900s reveals that by labeling certain traits, the scientist or social activist was able to create terms that appealed to the listener's or reader's distrust, anger, frustration, and hatred by creating a quasi-logical connection between "social misfits" or "the unfit" and the volatile cultural milieu. Eugenicist discourse strategically manipulated the *pathos* of that vocabulary in order to render many arguments and promises of reform emotionally irrefutable. In essence, the audiences of many eugenicists, including Michael F. Guyer, were already predisposed to agree with eugenic ideas. These ideas, which focused on the plight of the many as a result of the fault of the few, were intensely attractive and often operated by explaining bigotry with scientific rationales. The continuing expansion of cities, the increasing number of people in poverty or on social welfare, the growing number of immigrants to the United States, and relatively recent changes regarding civil rights had a great impact on how white Americans in the middle or upper class thought about "other" people. "Feeblemindedness," one of the eugenics movement's most important terms, was used as a "catchall category for anyone exhibiting unacceptable social behavior" (Engs 69). The "feeblemindedness" found in deviant behavior such as criminality and prostitution was, peculiarly enough, often addressed in the same manner as the "feeblemindedness" found in patients suffering from insanity or genetic defects such as Downs Syndrome. Such blanket terms were especially useful to eugenicists trying to link different members of the same family to a common "germ-plasm" that could be held accountable for deviancy. Michael F. Guyer believed that the "problem of feeble-mindedness" was one of the most pressing concerns of the United

[7] The term *Mendelian, or Mendelian inheritance,* is applied to the system in which traits are passed down through generations of living things. It often refers to the simple dominant/recessive structure discovered by Gregor Mendel in the 19th century.

States at that time, and its threat was a large reason for his advocacy of eugenics and the improvement of the American “germ-plasm.”

The concept of “race betterment” addressed by Guyer was many eugenicists' leading concern. By demarcating the Anglo-Saxon race as superior, and by investigating the differences among races and race-mixing's detrimental effects, eugenicists were playing on a national support of racism that ran in deeply emotional currents throughout the post-Civil War United States. This idea was closely tied to increased immigration to America and played on the fear of “race suicide,” a theory espoused by individuals who believed that by not reproducing at a high enough rate, and by indulging in “race poisons” such as tobacco, alcohol, or promiscuity, the Anglo-Saxon race was in danger of “extinction” (Engs 9-10, 188-93). The medical advances that allowed for safer childbirth and the social changes that inspired humanitarian impulses seemed to the eugenicists to be “truly a double-edged sword, reducing the infant deathrate but swamping the society with unfit children” (Tucker 57). Michael F. Guyer, in his last chapter, stated that with the early twentieth century’s “improved methods of sanitation and care of the sick, the pauper and the defective, these classes have been freed in part from the stress of an environment that under natural conditions would have resulted in their premature death and consequent infertility” (*BWB* 1927, 414). Because this threat of external and internal “extinction” was given credibility by science, racism was also called on to play a great part in the eugenicists’ social criticism, leading many to encourage and support “southern antimiscenganation laws and the Jim Crow policies that kept blacks separate and unequal” (Tucker 60). Even with that ancient bias against African Americans, “there was no campaign of antiblack propaganda anything like the systematic and relentless barrage directed against the immigrants” (Tucker 60). Guyer addressed

the issue by making immigration a problem for democracy itself, claiming that "the lethargy of the dullard will never kindle into a glow from the flaming torch of freedom" (*BWB* 1927, 396).

Although prejudice against immigrants and a population of recently freed slaves were primarily American concerns, eugenics was a global movement, gaining support and leadership "from biologists, psychologists, criminologists, sociologists, physicians, social workers, liberal clergymen, and many others who prided themselves on keeping abreast of the latest developments in the study of man and the solution of social problems" (Haller 177). It crept into periodicals in the guise of friendly advice, religious instruction, and humorous entertainment (Davenport; Fernald; Ellis; Sheldon). In a study of literature of the early twentieth century, Lois A. Cuddy and Claire M. Roche trace ideas of evolution eugenics and ambiguous racism in the works of William Dean Howells, Charlotte Perkins Gilman, Jack London, Stephen Crane, Frank Norris, W. E. B. Du Bois, Pauline Hopkins, T. S. Eliot, William Faulkner, Thornton Wilder, and John Steinbeck.[8] American naturalism, one of the most prominent literary movements of the time, "incorporated a wide range of influences like Marx and Freud, European writers like Zola, theories of social response and organizations, and Darwinian theories of animal origins, of adaptation to environmental forces, of inheriting traits in human descent with modification, and of the struggle of the fittest for survival" (Cuddy and Roche 27). The rhetoric of eugenics was accepted into the household vocabulary of American families, intellectuals, and socialites.[9]

This construction makes eugenics a social necessity based on the enhancement of the "breed" of humanity by grouping and rejecting a broad spectrum of people who were seen as

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[8] Although themes of fatalism, social Darwinism, and "survival of the fittest" can be found in many examples of 19th and 20th century, perhaps the best-known example of eugenics played out in fiction is Frank Norris's *McTeague* (1899), in which the protagonist suffers from a "hereditary evil," and lives in a world of generative stereotyped characters of Mexican, Jewish, and Swiss-German ethnicity.

[9] Popular culture during the early 20th century embraced eugenics terminology. Popular campaigns against the "feeble-minded" were waged (Fernald), criminal behavior began to be discussed as a problem of heredity (Münsterberg), and religious leaders took the eugenics movement as another way to spread religious values (Sheldon).

"unfit" in many ways. Current studies now identify the late nineteenth- and early twentieth-centuries as an important era for the developing category of disability, which was constructed in order to separate the "fit" from the "other," the latter often being pointed out as such by eugenicists. The disability category was then put in terms that would stigmatize people with any imperfections as the "unfit," thereby creating an "institutional discrimination on par with sexism, heterosexism and racism" (Barnes 43). DePoy and Gilson trace the roots of disability from Ancient Greece, through the Middle Ages, the Enlightenment, and the Victorian Era. The labels applied, such as "cripple," "deaf," or "blind," were used to identify those who had little or no claim to a legitimate place in a production-based economy, a system which "associated economic productivity with legitimate goodness" (DePoy and Gilson 19). These "unfit" were thus a "burden" to the state and were labeled as "unfit for reproduction" in most cases of examination by eugenicists.

This labeling of "the other" is indicative of the concept that the study of rhetoric "offers an unparalleled resource for analyzing, understanding, and rethinking the nature of ability and disability, 'normal' and 'cripple'" (Brueggemann and Fredal 129-135). In contemporary criticism, this approach is a widely accepted method of understanding disability as a social construction promulgated by the manipulation of the rhetorical constructs of these differences. The eugenicists, who "believed that natural selection and Mendelian gene distributions could provide models for social ethics" (Smith 132), took part in this rhetorical construction to influence public opinion. The efforts of eugenicists and their supporters were for the most part directed towards these methods of influencing the public. Popularizers of eugenics desired to convince their audience of the "scientific necessity" of their claims rather than engaging in scientific studies. The science of eugenics was most often a tool used to convince people of their

biases against certain “unfit” members of society and to align these “unfit” with what was unacceptable to the creation of a “well-born” America.

Ideas and Insinuations

The primary argument of *Being Well-Born* is intended to persuade the audience of the legitimacy of the eugenics movement. Guyer’s strategies include convincing the audience of his own compassionate understanding, the threatening forces of genetic hazards on society, the logical validity of the scientific conclusions of the eugenics movements, and finally of his own trustworthiness in comparison to other eugenicists. The use of *pathos* in Being Well-Born is devised both to support Guyer’s *ethos* as a compassionate scientist and to maintain an emotional adherence to Guyer’s arguments. *Logos*, as presented through science and syllogism, is supported by *pathos* and supports the *ethos* Guyer creates. Michael F. Guyer means to achieve trustworthiness is by creating a book which seems “mediocre” (Reuter 667) (read: rational) as a pro-eugenics text. Because Guyer does not always rely on explicit argumentative strategies, inserting his beliefs instead in a comparatively subtle fashion, he is able to get his point across without adopting the aggressive prose of other eugenicists and alienating possible adherents to eugenics. In *Being Well-Born*, he combines this subtlety with more explicit arguments and organizes them to seem as impartial as possible.

Examining the organization of the text reveals how the logic of his argument is set down in consecutive sections. The 1927 publication, or the definitive realization of Guyer’s vision of his argument in public science, is divided up into twenty-three chapters with a glossary, references, and index. The first twelve chapters of the book deal with explicitly “technical” matters of biology, reproduction, and heredity. The remaining chapters are Guyer’s explicitly

expressed interest in the human applications of his research and professional knowledge. The first part of the book is what we can now call the data, according to Toulmin's theory of argumentation, on which the claim made in the latter half of the book is based.[10] The warrants and backing can be found in the hyper-technical aspects of the biological discussion of heredity, but within each chapter Guyer creates micro-arguments that give data to support each claim relating to every issue broached in the book, from feeble-mindedness to venereal disease. In Chapter 22, on "Immigration," Guyer begins with the warrant of immigrants' threat to democracy then creates backing which focuses on the statistical increase of immigration, of immigrant paupers, the feeble-minded, and syphilitics, of crime among immigrants, and of "very inferior intelligence" among immigrants (*BWB* 1927, 396-402). He concludes the chapter by emphasizing that "only the most worthless and vicious of the white race will tend in any considerable numbers to mate with the negro" and that Americans "are certainly taking great risks in accepting in any considerable number into our country those races we can not assimilate to advantage" (*BWB* 1927, 411), which, as Guyer has already said, is every one.

Guyer's mission is to prove that the eugenics movement is justified, and this leads him to imply that action should be taken to support his views. An example of this is in a section of rhetorical questions: "Surely it is just as important to give lives *to* a nation as to give lives *for* it. Is there anything of greater importance in the world than the breeding and rearing of the right kind of citizens?" (*BWB* 1927, 418, original emphasis). Guyer, however, said, not that his ideas should dictate legislation but that they should instead "inform" legislators, who were "eager for solutions to problems of crime and dependency [and] often welcomed the ideas of these experts,

[10] Toulmin's theory of argumentation divides an argument into its simplest components, including the claim (conclusion of the argument, often stated last), the data (primary reason for the claim), the warrant (logical connection between the data and the claim), backing (support for the warrant), the qualifier (or indication of the strength of the argument), and the reservation (stated exceptions and rebuttals to the claim). Further information regarding Toulmin's theory of argumentation can be found in *The Uses of Argument* by Stephen E. Toulmin. New York: Cambridge U. P., 2003.

especially when the ideas were as inexpensive as sterilization" (Larson 31). Guyer does not seek to define any specific qualifications for legislation regarding eugenics, but he recommends promoting an "increase of public interest in feeble-mindedness" and urges that "[i]f valuable efforts are not to be wasted and constructive policies are to be instituted, however, some sort of follow-up system should be devised" (*BWB* 1927, 346).

He and his audience implicitly agree, as upper-middle-class Anglo-Saxons, that the United States is in decline and that Guyer has the authority and the knowledge to accurately describe the issue of heredity. Most readers would have even agreed that the eugenics movement, if carried out fully, would result in the betterment of their lives. *Being Well-Born* is written mainly to justify the importance and the moral imperative of the eugenics movement in a time when many eugenicists "stood upon science and asked others to abandon sentimentality" (Haller 161). There was at this time a pessimistic, reactive sect of eugenicists who spent more time on the woes of mankind than scientific or ethical justification for their extreme conclusions. This textbook focuses most of its non-technical attention on justifying the ethical nature of accepting eugenics. Because even in the 1920s eugenicists were in danger of repulsing people from adherence to eugenic ideals, Guyer chose to allow his readers to make an easy jump from the logical and emotional appeals to adherence to his conclusions.

However aware Guyer was regarding the question of legality and jurisdiction, he kept his role to the sphere of the scientist. Because of his work as a zoologist, he was not for lack of respect or authority. The pervasive aspects of the eugenics movement and the ideas held by its followers and leaders show that Guyer's *Being Well-Born* would be accepted and understood by his audience. Dennis S. Devlin and Colleen L. Wickey, in their study of Michael F. Guyer's contribution to the eugenics movement, state that *Being Well-Born* "was widely used as a life

science textbook for over 15 years, and was a clear attempt to get the fundamental eugenic message to the masses," and that he "was a popularizer, subtly presenting a scientific foundation for eugenic theory while also encouraging the application of some of its more benign concepts" (Devlin and Wickey 199). Guyer could promote his eugenicist views more easily than the founders of the movement, such as Francis Galton, or the heavy-handed popularizers, such as Alfred Wiggam. Guyer had a certain advantage in constructing an *ethos* of reasonableness and compassion in a time when other eugenicists repelled Americans who recognized the movement's more ominous aspects. Guyer, in effect, gave his audience hope.

By adopting the terms of the eugenicist era, Guyer was able to co-opt the extremely powerful *pathos* built into such a vocabulary, which both represented the disgust and fear of the "unfit" and the protectiveness and patriotism that surrounded ideas of the quintessential Anglo-Saxon American family. Guyer seeks to protect "the rights of the child" and "throw a sheltering screen of social environment around the young individual which will fend off wrong forms of incitement and chances for harmful stimuli and afford opportunity for development of proper modes of expression" (*BWB* 1927, 330). Guyer pairs these pathetic images with the threat of the "unfit" or "other," who would supposedly lead to the degradation of the city, of the country, and of humanity. These images are seen, especially in a society that feels threatened, as both concrete and symbolic—utterly important for the continuation of the quality of life enjoyed or hoped for by much of Guyer's audience. Indeed, Guyer claims in the preface of *Being Well-Born* that "all available data indicate that the fate of our very civilization hangs on the issue" and that he will bestow on his readers "full comprehension" of the issue (Guyer, Preface, *Being Well-Born* 1927). His audience could readily believe in the compassionate nature of a scientist who saw the squalor of the social misfits of society and sought to protect the "blessed family" from

the threat of their incompetent and criminal hands. Guyer could then build a comforting scientific *ethos*, which many fearful Americans responded to as positively as they responded negatively to the "unfit" they imagined they saw around them.

The Rhetoric of Science in Guyer's Eugenics

Despite the so-called negative transformation of culture at this time, the *ethos* of the scientist increased as the lives of everyday people were changed by the telegraph, the automobile, and medicines such as penicillin. Because of these immense changes, the perceived cultural value of the scientist skyrocketed. The eugenicist vocabulary in the emerging fields of statistics, biometrics, and psychology gave people what was most alluring to the panicked mind: hope. Scientists, through eugenics, offered a comprehensive view of the problems of society as simple and solvable. At the beginning of the 20th century, "[s]cientific thinking was ascendant," and "[l]ogical positivism, or *the intellectual effort to bring scientific standards to bear on the resolution of all issues*, had apparently rendered rhetoric obsolete" (Herrick 195, original emphasis). The scientist's insistence on being entirely objective "may itself be rhetorical in nature, intended to persuade the general public that science is the one arena of human activity in which rhetorical analysis is inappropriate" (209). This objectivity was widely believed to be an inherent component of the scientist's disposition, and in *Being Well-Born* Guyer also constructs an *ethos* of both rationality and compassion using *logos* and *pathos*. By addressing the concerns of his readership in this way, Guyer becomes to his audience a scientist, a teacher, and a healer.

Guyer easily completes the primary task of conveying an *ethos* of trustworthiness and rationality. He begins the book with criticism of commonly held beliefs and throughout the book attacks the "credulity" of people, the "unconscious tendency of mankind to give a dramatic

interpretation to events where causes are not certainly known" (*BWB* 1927, 281), and Guyer gains a semblance of rationality in exchange. Some popularizers of eugenics continued erroneous pseudo-scientific notions, but "authoritative writers like Guyer dismissed them and instead tried to introduce modern medical and biological sense into questions of childbearing" (Kevles, *Name* 67). Because writing a text concerning parenting and pedagogy at that time required a personal touch and an *ethos* of honesty and unrighteousness, Guyer refers to himself often as a biologist, whose task is "to seek a material basis, a continuity of actual substance, for this continuity of life and form between an organism and its offspring" (*BWB* 1927, 3). Guyer co-opts the authority of the institution at which he is a professor and of the profession of which he is a respected member. He is not simply Mike Guyer, but rather "Michael F. Guyer, Professor of Zoology, The University of Wisconsin."

The balance that is struck in *Being Well-Born* between the objectivity of the scientist and the clarity of the writer of public science is maintained to fulfill the expectation that such texts "be dedicated toward maintaining and expanding a scientific community's comprehension of natural order, since bringing order to natural phenomena is the basis of all scientific endeavor" (Prelli, *Rhetoric* 121). Guyer may have kept away from adamant assertions concerning the importance of eugenics because this would harm his standing with fellow scientists. Even in the context of his time, Guyer was first and foremost a scientist, and "[e]ven those seeking explicitly to popularize science risk jeopardizing their *ethos* with expert audiences. They must find 'common ground' with technically unskilled audiences, leaving themselves open to charging that they are pursuing objectives other than those that are properly 'unscientific' or 'educational'" (Prelli "The Rhetorical Construction" 89). The success of *Being Well-Born* was also a product of the perceived professional scientific value of the author and therefore of the text. Michael F.

Guyer writes an expert, organized, extensive study of his subject and uses language that is technical enough to be difficult for the lay reader but is simple and readable in the non-technical sections of the text.[11]

An evident strategy in *Being Well-Born* is the combining of scientific terminology with fanciful narration and even poetry, which lends Guyer's *ethos* an appeal of sentimentalism. He uses poetry to assign the subjects of infancy, childhood, and youth a part in his science textbook, and although this makes his text less imposing, it also makes the poetry seem more scientific. In the first chapter, Guyer reprints excerpts from "Dorothy Q.: A Family Portrait" by Oliver Wendell Holmes and makes sure to include description of the "breath of a maiden's yes," and the "tones in the voice that whispered then / You may here to-day in a hundred men" (*BWB* 1927, 2). In this act of connecting the poem to his endeavors, Guyer earns the appearance of the compassionate scientist. This later counteracts the cold nature of his qualifying people as "common progenitors" and "remoter descendents." Guyer makes his audience feel that the science surrounding eugenics is natural, desirable, and aesthetic. More important, the *pathos* inherent in such moves allows his construction of *ethos* to be a combination of rationality and compassion, which makes him a credible author for a textbook dealing with people and society. In writing a textbook that utilizes the construction of an *ethos* infused with both *pathos* and *logos*, his suggestions and later conclusions seem scientifically valid and morally comforting.

As a pedagogical tool and a popular scientific text, this textbook also contains some of the more common signs and symbols of scientific discourse. Alan G. Gross, in explaining the importance of visual support, metaphor, and rhetorical style in the scientific text, shows how an

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[11] For more information regarding the rhetoric of science, the reader may consult the following sources:
Gross, Alan G. *The Rhetoric of Science*. Cambridge: Harvard UP, 1990.
Landmark Essays on Rhetoric of Science: Case Studies. Ed. Randy Allen Harris. Mahwah: Hermagoras Press, 1997.
Kuhn, Thomas S. *The Structure of Scientific Revolutions*. 3rd ed. Chicago: University of Chicago Press, 1996.
Prelli, Lawrence J. *A Rhetoric of Science: Inventing Scientific Discourse*. Columbia: University of South Carolina Press, 1989.

author such as Guyer relies heavily on the "invariance" (Gross 75) displayed by charts, graphs, and pictures in order to achieve the "transformation of the terms of science into theoretically important physical objects and events." The role of tables and figures is to present an "ontologically stable framework," and, through this process, discard "most of the properties of the actual physical objects" in favor of normalizing them, "ideally through quantification," so that that author has control of the significance of each object represented (Gross 75). By creating a symbolic system that represents "real" things on paper, the interpretation that the chart, graph, or diagram embodies seems more concrete and more stable. For example, Guyer uses genealogical diagrams to trace a faulty "germ-plasm," or trait, through successive generations. In these diagrams, white boxes represent people, while a black block or box represents a negative trait that has been found in individuals of the same family (see diagram, as shown in *BWB* 1927, 214). By treating the "black block" as a representation of a so-called negative trait's manifestation, Guyer provides his audience with evidence that this "bad trait" is something both concrete and predictable. In proving that the trait has been transmitted in predictable patterns, Guyer indicates that future progeny will display the trait as regularly as their ancestors. This forms an enthymemic argument that suggests the "black block" trait can be extinguished if the "black block" carriers do not reproduce.

This creation of metaphor is one of the common ways in which a scientist can use figures of speech to accomplish key conceptual moves in scientific texts and create a meaning that allows him to be both explanatory and manipulative (Fahnestock, *Rhetorical Figures* 7-8). In *Health and the Rhetoric of Medicine*, Judy Segal explores the conception of the scientist as a doctor, whose goal is to rid the patient (or the public) of a disease or malady. Diane B. Paul examines the change from regarding "mental and moral defectives" as identifiable in physical

appearance to being identified as “carriers.” (*Politics* 157-159). This construction of the “unfit” as carriers of disease was used by many popular publications of the time, allowing a eugenics popularizer to write that “the average man and the exceptional man were in the habit of transmitting to their children what they themselves had inherited in the way of sound or unsound bodies and minds. But they did not, as a rule, think particularly abut the matter” (Barnesby). Guyer, in discussing “the faulty germ-plasm,” also uses the common eugenics strategy of pathologizing the gene, employing words such as “insane,” “criminal,” “moronic,” “idiotic,” and “feebleminded.” He went on to say that “many apparently normal individuals of our average population are in reality carriers of some form of neuropathic or psychopathic defect” (*BWB* 1927, 354). Along with the graphical construction of hereditary traits, Guyer suggests that “only identifying carriers and preventing their breeding would provide a solution” (*Politics* 161), a suggestion that was both enabled by and supportive of Guyer’s *ethos* of the scientist-as-solution.

By using the ideas and vocabulary propounded by the eugenics movement, Guyer was manipulating the *pathos* of the audience's relationship to those words. The use of technical terms, *pathos* and *ethos* in scientific discussion can be taken as “essential and inevitable components of reasonable (though not rational) decision making” (Waddell, “Reasonableness” 7). Guyer's particular brand of *pathos* falls neatly into what Waddell would describe as “inappropriate,” and through Craig Waddell's study we may examine the unethical nature of Guyer's approach. The emotional argument, Waddell argues, creates a space between the enthymeme presented and the emotional reaction in the audience once they mentally complete the structure. The conclusion reached by the audience is emotional, not logical. Guyer, at the end of his book, asks the reader, “What shall the home of the future be with regard to its most important assets, the children?” (*BWB* 1927, 338), and the audience cannot, within Guyer's

terms, give any other answer other than to allow for eugenicists' infallibility. Chapter 13, "Human Heredity," follows an extensive study of hereditary theory in which it is proven that many animal and plant traits can be accurately predicted. Guyer makes the qualifying statement that "Mendelian principles are probably applicable to many characters of man" (*BWB* 1927, 199) and invokes *copia* to list over thirty traits which may be explained by Mendelian inheritance.[12] By doing this, Guyer leaves the audience to conclude that most such defects are Mendelian in nature and are inheritable in the predictable fashion of other traits Guyer has listed.

One of the most effective rhetorical devises in place in *Being Well-Born* is the enthymeme.[13] A striking example is in "Chapter XX: Crime and Delinquency." Guyer discusses the financial and social chaos that is caused by criminal activity. He then proceeds to demonstrate that most criminals are "born criminals," and that mental defects are "most frequently associated with crime" (*BWB* 1927, 372-373). After briefly discussing the possibility of successfully raising a child predisposed to crime, he ends the chapter by insisting that to let mental defectives "produce progeny is clearly unpardonable" (*BWB* 1927, 377). By first connecting the idea of social chaos and economic troubles with crime, and then showing a strong causality link between crime and "mental defect," he sets up the first part of the enthymeme. When he insists that allowing "defectives to multiply" is unpardonable, it is quite clear that Guyer is allowing his audience to make the assumption that in order to avoid social chaos the mentally defective must be sterilized. This type of secondary conclusion is a tactic that lets Guyer to look rational and self-restrained while compelling his audience to collect the facts and make the inevitable conclusion.

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[12] *Copia* is defined as "the technique of enumeration or listing, creating a series that suggests a large number of things, too many for the writer or speaker to specify" (Fahnestock, *Rhetorical Figures* 63).

[13] In Aristotle's *On Rhetoric*, the enthymeme is a truncated syllogism, or a rhetorical device which states two of the three parts of the syllogism, the third part left out as an assumption already held by both speaker and audience.

By finishing Guyer's enthymeme, his audience fulfills their own need to emotionally and logically justify the opinions with which they have both opened and finished the book. This occurs because in experiencing Guyer's *ethos*, the audience completes the argument his supposed desire for objectivity prevents him from making. The political action for which this text prepares the audience is founded on this enthymemic argument, one that morally justifies their decisions and is encouraged by the powerful and comforting *ethos* of the scientist manifested in Guyer's rhetoric. According to Waddell, rational arguments are problematic because they can be inauthentic or deceptive, they may be too "timid" to venture a logical leap, they may lack the motive force to turn agreement into conviction, and can also lead to "morally indefensible conclusions" ("Role of Pathos" 128). In *Being Well-Born*, Guyer manipulates all of these problems in order to create a more powerful appeal to his audience. As Waddell notes, "[t]he privileged position enjoyed by *logos* in Western culture has often led to the denial of any appropriate role for *pathos* in science-policy formation" ("Role of Pathos" 128) and, therefore, is subdued in favor of seemingly rational arguments, which Guyer seeks to create in this text.

The social danger is that "in denying our emotions, we may actually increase the danger of emotional manipulation" ("Role of Pathos" 128). Creating *pathos*-based arguments, however, forces Guyer to account for the decisions he makes. Waddell explains this process through "the social expectation that a decision will be justified or *justifiable,"* which "acts as a fail-safe device to ensure that decisions are 'well-reasoned.' From this perspective, the acid test of a socially acceptable decision is not that it was *made* rationally, but that it is rationally reconstructable." (Waddell, "Reasonableness" 9). Guyer concludes his primary claim by enacting the *pathos* of children, "the foreground of the mental picture which arises when we hear the very word *home*" (*BWB* 1927, 441). The reader is responsible for the "duties demanded" in the "fate of many

future generations" (*BWB* 1927, 441). This social imperative rests explicitly on the scientific warrants Guyer has communicated to his audience, although his audience would be acutely affected by the *pathos* of this section as well. The emotive aspects of eugenics or any other scientific endeavor can bring our attention to the human aspects of any discovery or application of science but can also persuade action to be taken swiftly and without deliberation. From this perspective, Waddell's claim that "we must develop a clearer understanding of how we distinguish appropriate from inappropriate emotional appeals" ("Role of Pathos" 128) rings true and allows for a deeper analysis of how Guyer distorts and manipulates emotional responses in order to be more persuasive.

A Scientistic Success

The general message of *Being Well-Born* was not an explicit and full-fledged defense of the eugenics movement, but rather a "restrained insanity" (Reuter 667), a passive and superficially indecisive attempt to secure the reader's trust and confidence through the *ethos* of rationality, compassion, and enlightenment. Indeed, early reviews of the book show that Guyer sufficiently escaped controversy by using his "weak rhetoric" in ways transparent to lay readers. Guyer encourages his audience to believe that he "takes a conservative opinion" regarding common eugenicist suppositions and, therefore, exhibits "fairness" (Kellicott 606). This representation of an impartial author is supported by the knowledge that Guyer and the other editors of the book have "the authority on biological questions" (Kelsey 99), encouraging the audience to relax in knowing that "there is no occasion to review it in detail, particularly as Dr. Guyer has pointed out the questions still unsettled" (Kelsey 100). Guyer, therefore, wins his audience's confidence before the book's first few pages.

Jeanne Fahnestock's examination of scholarly scientific controversy further clarifies that Guyer's weak or "hedging" language functions by obviating confident statements of fact, "invok[ing] broad alignments shaped not by what they find more credible but by what they find less incredible" ("Bering Crossover" 57). Although Fahnestock notes the surprising level of commitment that researchers have towards an issue supported by "uncompelling" evidence, the "eternal possibility of undiscovered evidence" often justifies claims from such scientists (56). Guyer displays this strategy by using qualifiers of his claims that allow for the generation of the idea of possibility or probability, the force of each phrase depending on the amount of data or justification available to back up each claim: "Beyond doubt," "no one can doubt," "it is probably," "[t]here can be little doubt," "in all probability," and, to avoid any hasty conclusion, the demand that "we must have more data." The possibility for evidence, and thus debate, is endless, as is the possibility of each argument. The relegation of opposing ideas to the category of "less credible" work fluidly and effectively as a method of maintaining credibility. Guyer, therefore, effectively demonstrates that he has an accurate awareness of probable knowledge as well as an intelligent grasp on future discoveries.

Being Well-Born was designed to function as a logical communication of scientific ideas and discoveries, based around a "progressive" movement towards eugenics education. Guyer's most vital move, however, comes when he stops short of adopting the same level of certainty and didactic declaration of civil responsibility as his contemporaries. Where Galton asked the public to introduce eugenics "into the national conscious, like a new religion" (Galton 332), Guyer asks repeatedly for "more data" and "further inquiry," allowing himself to be seen as hesitant, unwilling, or unable to draw pronounced and confident conclusions from the information that he is presenting. Many of his critics, both past and present, do not know exactly what to do with

Being Well-Born except state that it "ended limply" (Pauly, "Essay Review" 142) and that Guyer demonstrated that he, "like most moderate eugenicists, did not advocate the negative side of the movement, which included sterilization programs and immigration restriction, as much as he did the positive side" (Devlin and Wickey 200). Even contemporary reviewers found it "mediocre" as eugenics propaganda (Reuter), and dissatisfying in its call for responsibility for actions (Kellicot 606). Despite this perceived weakness, it was a popular textbook and influenced public perceptions using the rhetorical strategies I lay out here. As perfectly as Guyer constructed this text to influence the public during the time of its publication, the text was always destined for America's dustbins and antique used bookstores.

But any analysis of the text reveals these indefinite descriptions of the text as "limp" and "weak" fail to properly justify those claims through analysis. Several sources cite Guyer's stance on many eugenicist issues as equivocal or ambiguous. Philip Pauly suggests that "[a]fter describing the arguments for sterilization and rejecting those of its major opponents, [Guyer] doubted its necessity, effectiveness, and moral and hygienic consequences" (Pauly, "Essay Review" 141-142). Guyer is described as having been ambivalent towards sterilization (Engs), but Guyer was, on a closer look, a proponent of it. By 1923, when he gave and subsequently published his lecture "Eugenics," Guyer believed that there was nothing more important to the survival of the United States than to solve the problem of a population filled with too many "good-for-nothings, drunkards, criminals, and sex-offenders" and too little physically and mentally American citizens. His solution was "(1) prevent the mating of the unfit, and (2) encourage the reproduction of the best" ("Eugenics" 241). Four years later, when *Being Well-Born* was published in a second edition, he was still regarded as ambivalent, and while he could be considered a comparatively moderate eugenics proponent, he used rhetorical strategies and a

vocabulary that rivaled the most adamant popularizer. Through the use of enthymemes, he justifies the economic and moral necessity of sterilizing the unfit and "criminal types" for the good of the nation.

To maintain his scientific *ethos*, however, and to maintain the adherence of his audience, Guyer presents moderate ideas which, in some cases, seem to react against both anti-eugenicists and pro-eugenicists. When mentioning sterilization, he sometimes seems to be defending the overzealous ideas of its proponents rather than attacking the case of opponents. In cases of "Criminal Types," for instance, Guyer seems to be defending the criminals who might not actually possess "defective mentality." By doing this, Guyer creates an *ethos* of the more reasonable eugenicists, which allows him to look more and more credible and indecisive to his audience (*BWB* 1927, 434). Guyer, consciously or unconsciously, maintains an audience adherence that is far more lasting and pervasive than the result yielded by eugenicist strategies such as aggressive language or religious imagery. Guyer had a "somewhat popular, muted image" and "carefully avoided any eugenic overtones" in his professional scientific work in eugenics (Devlin and Wickey 205). Regarding this less aggressive stance, Guyer's audience is unable to consciously label him and consequently disregard him as an adamant (read: irrational) eugenicist. Both the explicit and implicit conclusions that are inherent to *Being Well-Born* have the potential to create tacit acceptance and even approval of the eugenics movement. As Pauly notes, "Guyer pulled back at the point of nearly every specific conclusion" ("Essay Review" 142). These conclusions, however, could be as freely drawn by his readership as fruit plucked from a well-tended branch.

Marouf Arif Hasian in *The Rhetoric of Eugenics* explains how the set of terms utilized by eugenics advocates alters perceptions and ideas. Hasian studies eugenicists' ability to win

definitional control of the heredity debate and investigates the misuse of both the supportive and disparaging positions on "eugenics" as well as the social consequences of that dichotomy. Hasian explains that dichotomous stances on the ethical or moral nature of eugenics "deflect our attention from the power relationships that influence the acceptance or rejection" of the ideas of eugenicist thinking (Hasian 5). These "power relationships" involve the value and bias inherent in the language with which we describe eugenics-related issues surrounding the eugenics movement. By dismissing each and every idea that came out of the eugenics movement, we limit ourselves to conceiving of scientists as motivated by social totalitarianism or unadulterated altruism, thereby distracting from the question of how the scientist gains control and why the audience responds positively to his rhetorical strategies.

Michael F. Guyer wanted people to be happy. He wanted them to be able to use the ideas garnered from scientific achievement in order to contribute to a healthy society and maintain healthy lives. As a scientist, he created a textbook that would appeal to the largest number of people, and as a progressive, he advocated eugenics to inspire social change. But the mild presentation of such ideologies shows that the well-intentioned scientist is no better than the one who seems malicious. Guyer didn't build on bad science; he built on bad discourse. He manipulated the emotions of his audience and adopted terms which controlled the way in which people's very genes were judged. *Being Well-Born*, therefore, was written with the intent to control the opinions of his audience rather than to inform them. Guyer's chief concern was in making his arguments seem as convincing as possible using these rhetorical strategies, and paid far less attention to the scientific structures with which he demonstrated his ideas. Guyer was an excellent and accredited scientist, but *Being Well-Born* was a rhetorical text that primarily functioned to convert the audience to eugenic ideas.

Guyer was "devoted primarily to his scientific research and to the importance of what he called 'biological righteousness' in promoting the 'happy life.' But motivated by a social conscience and a concern for the future, he used these scientific themes as vehicles for conveying to the general public his basic eugenic message of 'better living through heredity'" (Devlin and Wickey 208). Because Guyer really wanted to give American society a chance at "biology and the happy life," he utilized the terms of eugenicists and the rhetorical strategies that would make him the most successful in projecting his hopes. As Mark Lubinsky wrote in "Scientific Aspects of Early Eugenics, "[i]f eugenics was simply bad science, then the obvious lesson is that bad science makes bad social policy. But if eugenic science had appropriate rationales, we must be cautious even in using "good" science to guide us in social decisions" (78). Guyer's "teachings helped create a pro-eugenic climate of opinion" (Kevles, *Name* 94), and his attitude allowed his audience to bestow on eugenics a respectful nod and a tacit approval. *Being Well-Born* ensured that the ambivalent would continue to allow eugenicists a valid place in the political discourse of the time, and created enough trust between the audience and Guyer for his audience to feel secure in supporting or failing to oppose eugenicist ideas.

After "the Germ-Plasm" Becomes "the Gene"

During and after World War II, "as the public slowly became aware of the brutality of the Final Solution, many eugenicists revamped their thinking. They began to consciously distance themselves from overt hierarchies and rankings, particularly those predicated on race or class, which was rejected as simplistic and anachronistic" (Stern 152). Eugenicists had realized by this time that "attempts to stamp out hereditary traits defined as recessive or latent, including alcoholism, immorality, and the catchall of feeblemindedness, had been proven futile" (Stern

152). Sterilization was rejected and "positive" eugenics, or the encouragement of "fit" individuals to reproduce, took the place of what was then called "negative" eugenics (Stern 152-154). Although in some states sterilization escalated throughout the 30s, 40s, and even 50s and 60s, the newfound repugnance towards "Hitlerization" of socio-political policy created a backlash against eugenic ideas (Larson 146).

Although discussion of the 1940s according to a "rigorously historicist sensibility would lead to avoidance of the term 'eugenics'" (Pauly, "Essay Review" 144), an examination of texts similar to *Being Well-Born* reveals rhetorical strategies similar to those of the 1920s. The traits that Guyer described as hereditary flaws and social dangers continued to be seen as negatively as when Guyer's contemporaries helped label them. In the mid-1940s, scientists implied that a life led by a person who doesn't embrace similar religious and social ideals may be dealing with a more sinister "personality maladjustments" (rather than "feeble-mindedness") whose only cure is a forced normalcy onto individuals. Importantly, the rhetorical treatment of "difference" and "disability" often creates a relationship between mental deficiencies and physical impairments and the relationship both have with deviating from the mainstream (Wallin, *Personality Maladjustments and Mental Hygiene*). Although the explicit insistence on physical removal of the unfit from society had disappeared, the well-wishing author was able to create arguments similar to Guyer. *Logos* was used to convince the audience of the rationality of the scientist, and *pathos* was used both to repel readers from the "flawed" individuals in question and to attract them to the compassion of the scientist, all of which contributed to the *ethos* of the scientist and the belief in the benign nature of the ideas presented.

Throughout the discourse following this genetic and social scientific discourse, we can see that throughout the 60s achievement was still treated as a product of our genetic

characteristics. More important, individual characteristics were thought to be the property of society as a whole. One scientist notably posited that "[o]ne may sensibly ask the question whether our collective national intelligence is adequate to meet the growing needs of our increasingly complex industrial society" (Jensen 89). Persistently, much like the strategies of Guyer, the "nourishment of mother and child," or the *pathos* of the family and the sacredness of the child was time and again evoked as an emotional justification for preoccupation with genetic progression (Crow). Even as late as 1986, the cost and public threat of hereditary behavioral disorders were seen as an important facet of public policy (Pauls), and every cure, no matter for what facet of "faulty" personality were being discussed, was scene as a possible "reduction in the years of pain and misery"(4), and such *logos* were enacted even as the author admitted that "it is clear that much work is needed before we completely understand the genetics of behavior" (Pauls 63).

Current educational discourse on genetics, childhood, and society reflects the current interests and trends in academic and popular culture. The nature/nurture debate is brought to the attention of parents everywhere, the conclusion of which always seems to be that parents much either correct or not damage the "path" that the child may be put on from birth (Grigorenko). The concept of parenting and of the development of the child, however, has become intensely personal, and many authors advocate the protection of the infant from society rather than the protection of society from the genes of any unfit infant. Authors of childhood studies often create arguments that are more nurturing and less competitive in the realm of appearance, intelligence, and ability (Rankin). The realm of parenting is met with the realm of genetic engineering, which, unlike most parenting issues, has come to the forefront of popular culture and ethical questions. Much of the discourse surrounding genetics is of the ethical nature of it,

and the arguments for both sides enact similar arguments that were created by eugenicists, including the importance of the socio-political health of America and the *pathos* of the child (Gerdes, Gaudillière).

As Hasian points out, "we are witnessing a renewed interest in the possibility that human beings may in fact be inherently "unequal," at least as far as their genetic profiles are concerned. Journalists, scientists, and biotechnical companies bombard us on a daily basis with information on the relationship between genes and a variety of traits and social behaviors" (Hasian 2). Because scientists have been given this role in society as keepers of knowledge and protectors of truth, modern theorists have insisted that to understand science, and therefore make informed and appropriate decisions regarding it, we must understand "the manner in which a particular set of shared values interacts with the particular experiences shared by a community of specialists to ensure that most members of the group will ultimately find one set of arguments rather than another decisive" (Kuhn 200).

As humans find an increasing number ways to use scientific discoveries to benefit mankind, also increasing is "the importance of ethical questions about the use and yield of that power" (Smith 132). Looking at science as a discipline that justifies itself puts us in danger of thinking that movements such as eugenics come from "bad science," but "avoiding the old path may require more than simply insuring that our policies are based on "good" science. Indeed, as genetics evolves and we turn once more to traits of social interest, technical factors may again point toward eugenic considerations" (Lubinsky 90). Although science is based on "autonomous" principles and empirical date, this does not mean "that it is free from identification with other orders of motivation extrinsic to it" (Burke 27).

The "good" and "bad" of the possible effects of genetic engineering, therefore, should not be stifled by a conversation which is separated into a conversation dichotomized by warring factions. In our present conversation of genetics, much like the conversation that surrounded eugenics, we are given arguments based on *pathos* we cannot emotionally reject, *logos* we cannot deny, and *ethos* on which our entire conception of society is based. And so far, "rather than coping with the ubiquitous nature of eugenics and exploring the multiple ways that these types of arguments enter into our popular culture, we have created several polarized views of eugenics that trivialize its importance" (Hasian 2). If we allow genetic engineering or other continuing issues that were once addressed by eugenics to be divided into two sides which appear to everyone but their proponents as thoughtless and extremist, we may not only prevent people from seeing the justification of both sides, but might also generate an apparent middle ground which has a persuasive appeal which may, like Guyer's *Being Well-Born,* lead to the tacit approval of the seductively happy medium. All of these things arrest conversation before facts are explored and arguments are fully set down, and lead to the public making decisions (or letting others make them) to let the "loudest" side win.

What we need, according to Hasian, is informed conversation so that political efficacy is not determined by science and science alone. According to Smith, "[m]oral and ethical agency is an attribute of people, not of medicine or the scientific method" (Smith 132). The emergence of disabilities theory in modern thought has allowed for the exploration of ideas which are not focused on the gene, but on theories which allow people to be looked at as people rather than economic tools or fodder for future generations. Simi Linton has called for "conceptualizations of people, with or without disabilities, as parts of a whole and integrated universe of humanity" (Smith 132). Conversations of regarding the possible values and dangers of movements such as

genetic engineering may effectively succeed in allowing people to see through the value terms which the discourse might adopt in order to make better informed decisions.

Conclusion

No one can really protest when scientists take on pertinent social issues and direct their energy and intellect into projects that promise to change dysfunctional communities, nationwide social conditions, and the very advancement of the human race. The context of early twentieth-century America allowed for the acceptance of beliefs that became an invasive part of the tradition of "common knowledge" and even "common sense." When the eugenics movement began in the nineteenth century, the ideas garnered from scientific discoveries, and their presentation, left the public with very little doubt that the people involved had good intentions, and even less doubt that their ideas had promise. The intuitive desire for progress, achievement, treatment, and "finding a cure" in relation to social problems seemed overwhelming to a majority of Americans, and the seemingly omnipotent idea of scientific discovery led the eugenics movement to be embraced and absorbed into every facet of American culture so that the public accepted the eugenicist's rhetorical reconstruction of reality. The definitional control that eugenicists wielded over those perceived as "unfit" allowed eugenic ideas to be translated into the very seams of early twentieth-century American life. All of this made eugenicist ideas learnable and scientific terms usable in everyday life, which in turn created a eugenics movement which became real, relevant, and applicable to everyday life. But regarding science as an objective and rational process is very different from regarding scientists as objective and rational human beings.

By examining Michael F. Guyer's text, *Being Well-Born*, we are able to understand the relationship between the scientist and the lay reader of the time, and to place a critical eye on the rhetoric that allows the reader to trust the author and the opinions and "facts" with which the text concludes. Guyer's "background and beliefs led him to favor eugenics as a means of social reform" (Devlin and Wickey 207), and because he was a product of his times who helped to extend the life of the eugenics movement, we must ask ourselves about the discourse we see, hear, and feel all around us; what we partake in and what we simply experience. *Being Well-Born* in particular reveals a kind of subversive rhetorical agenda that operates, not mainly through explicit calls for eugenicist views to be adopted, but through the delicate balance of *logos*, *pathos*, and *ethos* between Guyer and his readers. This rapport maintains an audience adherence which in turn encourages the audience to reach conclusions aligned with the eugenics movement and then to act on these conclusions through political mechanisms and social interplay. Guyer suggests "social disapproval" of "certain marriages," the education of women and children, and considering personal liberty as a matter of such social importance as to create dire cultural consequences. *Being Well-Born*, in the time during which eugenics was most popular and when eugenics proponents' rhetorical strategies were most effective, was lauded as an examplar of a eugenics textbook and gained popularity in its scientific information and simplicity of style. The response to the book indicates the text's readability and suggests the public's willingness to complete Guyer's enthymeme and, without even knowing it, to agree with everything he never wrote.

Modern scientists who study genetics and research in the field take certain stances to separate themselves from the perceived dangers of such activity. They do this by claiming that their science is based on the individual, not society, that it has nothing to do with racism or

"historical coercion," and that they consider the dangers of their research enough to "deny any links between their research agendas and the prejudices, politics, and vagaries of the times" (Hasian 145). The scientistic persona, the scientist's *ethos* as an omniscient and benevolent public figure, is a particularly influential source of political power. The idealism associated with scientific discovery has not yet lost its vigor. As the term eugenics becomes more and more a thing of the past, hindsight might allow us to look on the movement with derision and disregard it as science gone bad. Genetic engineering and birth control, however, remain pertinent buzzwords that, unlike eugenics, are still heavily debated in the public sphere. Unlike more explicitly rhetorical texts, a work like *Being Well-Born* requires a more careful study of the problematic but inherently unavoidable inclusion of ideology within scientific discourse. Studying text as a method of gathering support for a political cause helps us to understand the ways in which the trials and social problems of our time invite us to accept arguments that seem innocuous and impartial. These arguments encourage us to accept a cause by simply asking us to agree with the simplest of things, that with which we already are predisposed to agree. By not being challenged to fight or to go against the grain, our deepest fears and desires can be manipulated. Our inertia can be used to support social policies which can make possible events on which we might someday look back with horror.

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